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C/O LANDON		CHOI, PETER H		
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			3623	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

general@IPHORIZONS.COM lfnt2000@yahoo.com intercomm@iphorizons.com

	Application No.	Applicant(s)			
Office Action Comments	10/722,408	SUBRAMANIAM, SUBHASHINI			
Office Action Summary	Examiner	Art Unit			
	PETER CHOI	3623			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)⊠ Responsive to communication(s) filed on <u>17 Ju</u>	lv 2009				
	action is non-final.				
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
ologod in accordance with the practice and in	x parte gaayle, 1000 G.B. 11, 10	0.0.210.			
Disposition of Claims					
 4) ☐ Claim(s) 1,3-6,8-11,13-16,18-21,23-26,28-31 and 33-36 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,3-6,8-11,13-16,18-21,23-26,28-31, and 33-36 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 					
Application Papers					
 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. 					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	ite			

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DETAILED ACTION

1. The following is a **FINAL** office action upon examination of application number 10/722,408. Claims 1, 3-6, 8-11, 13-16, 18-21, 23-26, 28-31, and 33-36 are pending in the application and have been examined on the merits discussed below.

Response to Amendment

- 2. In the response filed July 17, 2009, Applicant amended claims 1, 11, 21 and 31 and canceled claims 2, 12, 22 and 32. No new claims were presented for examination.
- 3. The previous rejection of claims 2, 12, 22 and 32 are rendered moot in view of the cancellation of the corresponding claims in the response filed July 17, 2009.

Response to Arguments

4. Applicant's arguments filed July 17, 2009 have been fully considered but they are not persuasive.

Applicant argues that Chatterjee does not teach or reasonably suggest the concept of custom tasks because Chatterjee relates to a work flow editor, where a single user has the ability to modify/define work flows of interest to incorporate desired program logics/tasks.

The Examiner respectfully disagrees. Although Chatterjee does indeed relate to a workflow editor that allows a user to modify/define workflows, this does not preclude a

user from defining a workflow to be used by others. Further, the user of the Chatterjee system may modify a pre-existing workflow or define a new workflow to yield a "custom" task for execution by themselves or others.

Applicant argues that the extension points of the present invention have the inherent feature that the execution of the work flow continues from the extension point, while providing for execution of the custom task associated with the extension point. Further, Applicant argues that Chatterjee does not contemplate the claimed extension points because there is no inherent requirement that execution continue from the extension points and instead provides the user/editor to define any desired flow based on decision points.

The Examiner respectfully disagrees. As seen from Figure 3, execution of the work flow continues from decision point 312 (i.e., extension point) and may include processing of custom tasks/activities. From decision point 312, processing may continue to Accepted PO Path 317, or to Data Entry 313. From Data Entry 313, processing may continue to Decision Point 314. From Decision Point 314, processing may return to Accepted PO Path 317 or continue to Rejected PO 315. Thus, from each of the decision points (i.e., extension points), execution of the work flow continues. Although the steps immediately following decision points may be custom tasks/activities, this is not precluded by the claimed invention.

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Official Notice

5. In the previous Office Action mailed March 6, 2008, notice was taken by the Examiner that certain subject matter is old and well known in the art. Per MPEP 2144.03(c), these statements are taken as admitted prior art because no traversal of this statement was made in the subsequent response. Specifically, it has been taken as prior art that:

It is old and well known in the workflow management art to be able to indicate a
task to be executed either synchronously or asynchronously.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 3-6, 8-11, 13-16, 18-21, 23-26, 28-31, and 33-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, 11, 21, and 31 recite the step of providing each of multiple users the ability to specify a corresponding custom task associated with an extension point in a work flow "without editing said work flow". The specification does not provide written description or support for the exclusion of editing work flow.

Claims 306, 8-10, 13-16, 18-20, 23-26, 28-30, and 33-36 are dependent on claims 1, 11, 21 and 31, and thus are also rejected.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 1, 3, 4, 8-11, 13-14, 18-21, 23-24, 28-31 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chatterjee et al.** (US Patent # 5,774,661) in view of **Hansen et al.** (US Patent #7,013,316) and **Bacon et al.** (US Patent #6,430,538).

As per claim 1, Chatterjee et al. discloses a method of enabling a user to extend a work flow for synchronization/consolidation of data between at least two data sources, said work flow for execution in a meta directory server, said method comprising:

providing, by a designer, a sequence of built-in tasks which together when executed implement said work flow (col. 3, lines 60-62, Workflow builder 214 is a subsystem that generates links or "maps" to define the steps, rules, and operations of a workflow) {a workflow is a sequence of steps and tasks}, a built-in task in said sequence of built-in tasks containing an extension point at a point of interest in said work flow for users (Figure 3 depicts a workflow built by a user and comprising a plurality of tasks; col. 5, lines 59-61; col. 6, lines 35-37; col. 7, lines 11-13 and 17-22; col. 13, lines 60-66; Default, built-in, or previously-defined tasks, processes, and operations are available for creating workflows. Existing workflows may be modified to create new ones. Decision point objects, or extension points, provide branching from one workflow to another.):

said work flow being designated for execution by multiple users as corresponding instances (col. 3, lines 52-53, Workflow administrator 216 is a subsystem that sets up users; col. 6, lines 61-63, Distribution points allow several users to follow a single path in a workflow),

receiving from said user data indicating a custom task associated with said extension point wherein said custom task is separate from said sequence of built-in tasks (col.5, lines 51-62, Workflow menu is used to set up, define, and verify new workflows. The choices in the workflow menu are New, Open, Import, Export, Define, Verify.. New is used to create a new workflow or operation, Open and Close are used to control access to existing workflows, Import and Export allow a user to store, remove, or add workflows; col. 6, lines 36-37, users are allowed to

choose an operation for a step from a list of previously-defined operations) {built-in tasks are kept in a separate list, retrieving built-in tasks is a separate process than defining new tasks} and contains a program logic specified by said user for the corresponding desired customization (col. 3, lines 60-62, col. 3, line 66-col. 4, line 2, col. 5, lines 58-59, col. 6, lines 9-26, 54-56; Creating or defining a new workflow, or the steps, rules and operations of a workflow, defining steps for a workflow, adding insertion points to a [preexisting] workflow diagram);

executing said custom task when said extension point is reached during execution of said built-in task in an instance of said work-flow for said user (col. 7, line 62-col. 8, line 14; A decision point helps to execute conditional branching for a workflow; col. 6, lines 46-50, A Detour mode allows insertion of a "detour" path to or from a workbasket or operation that is temporarily unavailable.. The Flow Control menu provides for insertion of flow control points such as insertion, distribution, and decision; col. 7, lines 8-11, Workflow/Complex Operation, also accessible by button 358, permits insertion of a sub-workflow or complex operation into a current workflow diagram); and

continuing execution of said sequence of built-in tasks from said extension point in said built-in task after executing said custom task in said instance such that all of said sequence of built-in tasks are executed (decision point 312 checks such data for certain properties, defined by the user in a manner described in connection with FIG. 4. As a result of this decision point 312, work flow processing will be routed either for further data entry 313 or to connection object "Accepted PO

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Path" 317. In the latter case, connection object "Accepted PO Path" 317 joins data from decision point 312 and decision point 314, database retrieval object 318 accesses a selected database and retrieves a specific record therefrom, and icons 319 and 320 indicate that the workflow is complete. Otherwise, data entry object 313 prompts the user for further input, decision point object 314 provides routing in response to the input data, and as a result the workflow either progresses to connection object Accepted PO Path317, indicating acceptance, or to work basket object 315, indicating rejection. In the latter event, work basket object 315 performs further processing, such as presenting a purchase order to a particular user as a rejected purchase order, at which point the work flow is complete, as indicated by icon 316; Rule engine 230 then evaluates 506 each condition, and a check 507 is made after each such evaluation to determine whether there are more conditions. When there are no more conditions for the current clause, a check 508 is made to determine whether there are more clauses... After all clauses have been evaluated, processing is done 509) {the

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The workflow process discussed by Chatterjee et al. is not explicitly directed towards synchronizing/consolidating data between at least two data sources.

5, Column 7, line 64 – Column 8, line 14, Column 8, line 58—Column 9, line 3].

workflow process is executed until no clauses or conditions remain} [Figures 3.

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However, Hansen et al. teaches a sequence of tasks for synchronizing multiple databases stored on multiple computing devices, which include the steps of determining whether the databases are already initialized, verify the existence of a database, determine database configuration from a user, and update the server computer database as the user changes their data on the client computer, as well as query the server computer for any changes since the previous synchronization to determine what data is to be sent from the server computer to the client computer [abstract, Figures 2-6, col. 7, line 57—col. 8, line 18].

Both Hansen et al. and Chatterjee et al. are directed towards executing a sequential process of built-in subtasks for accomplishing a task; thus, they are reasonably pertinent to each other and are analogous references. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Chatterjee et al. to be directed towards synchronizing/consolidating data between at least two data sources, because doing so ensures that a plurality of remotely located users are making decisions based on the same, consistent data, thereby reducing mistakes and errors in the decision-making process.

Although Chatterjee et al. teaches sequences of built-in tasks being used by many users and also that each user can provide custom extensions to said work flow by providing a corresponding instance of said program logic for said custom task (col. 7, lines 8-19, Workflow/Complex Operation, also accessible by button 358, permits

insertion of a sub-workflow or complex operation into a current workflow diagram. By defining subworkflows and complex operations, design of future workflow is simplified by re-use of such sub-workflows and complex operations... The Tools menu permits selection of commonly used operations for insertion in a workflow, based on previously-created definitions) {the sequence of tasks in a workflow or subworkflow may be stored and reused, presumably in other workflow processes and by other users of the enterprise}, Chatterjee does not explicitly teach the steps of:

providing each user with the ability to specify a corresponding custom task associated with said extension point without editing said work flow, the custom task specified by a user containing corresponding program logic to provide a customization desired by the user,

said flow being designed to execute the specified desired custom task in the corresponding instance if specified by corresponding user at said extension point;

However, Bacon et al. provides a workflow management system in which a defined sequence of personal subflow activities may be performed by one participant and instantiates and initializes a decision point agent with the branch expressions defined for the personal workflow [col. 9, lines 14-19, 52-59] (i.e., providing each user with the ability to specify a custom task associated with an extension point without editing the work flow, the custom task containing logic to be executed that provides the customization desired by the user). Personal subflows are stored so that it may be

used later in defining a workflow [col. 9, lines 44-45]. In step 710, work items are eventually routed to the participant who is defined within the workflow as the actor to perform the personal subflow for processing of the personal subflow activities (i.e., the custom task is executed in the corresponding instance as specified by the corresponding user at the extension point).

Both Chatterjee et al. and Bacon et al. are directed towards executing a defining and executing built-in tasks for accomplishing a workflow; thus, they are reasonably pertinent to each other and are analogous references. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Chatterjee et al. to be directed towards providing users with the ability to specify a corresponding custom task associated with an extension point without editing a work flow that provides a customization desired by the user, the flow being designed to execute the specified desired custom task in the corresponding instance if specified by corresponding user at said extension point, because doing so improves the reusability of subprocess definitions and interoperability, as stated by Bacon et al. [col. 3, lines 23-35 and 31-33].

As per claim 3, Chatterjee et al. discloses wherein said custom task contains an another extension point, said method further comprises receiving from said user data indicating an another custom task to be executed when said another extension point is reached during execution of said custom task (col. 7, lines 57-62, Execution of "data"

frm entry" object 311 provides the user with a prompt to enter data; col. 8, lines data entry object 313 prompts the user for further input, decision point object 314 provides routing in response to the input data, and as a result the workflow either progresses to connection object Accepted PO Path 317, indicating acceptance, or to work basket object 315, indicating rejection; col. 8, lines 50-67; Figures 3 and 5; A workflow can have more than one decision points for conditional branching.).

As per claim 4, Chatterjee et al. discloses further comprising:

determining a corresponding set of extension points available in each of said sequence of built-in tasks, displaying each of said set of extension points associated with a corresponding one of said sequence of built-in tasks, displaying said custom task and said another custom task and enabling said user to specify said custom task associated with said extension point, and said another custom task associated with said another extension point (col. 8, lines 15-41; Figures 3-4; A workflow builder display allows a user to customize a workflow by inserting decision points, where the decision points come from a set of predefined conditional statements.).

As per claim 8, Chatterjee et al. discloses wherein at least one of said two data sources comprises a relational database (item 318 in Figure 3).

As per claim 9, Chatterjee et al. discloses further comprising providing an utility to indicate that a specific one of said extension points is reached (col. 8, line 50-col. 9, line 13; Figure 5; Conditional statements provide a check for additional conditions, clauses or other objects.).

As per claim 10, Chatterjee et al. discloses further comprising providing an utility in each of said sequence of built-in tasks and said custom task, wherein said utility indicates extension points available in a corresponding task (col. 8, line 50-col. 9, line 13; Figure 5; Conditional statements provide a check for additional conditions, clauses or other objects.).

Claims 11, 13-14, 18-21, 23-24, 28-31 and 33-34 recite subject matter similar to that already rejected above.

Therefore, claims 11, 21, and 31 are rejected on the same basis as claim 1 above.

Claims 13, 23 and 33 are rejected on the same basis as claim 3, and claims 14, 24 and 34 are rejected on the same basis as claim 4.

Claims 18-20 and 28-30 are rejected on the same basis as claims 8-10 above.

10. Claims 5-6, 15-16, 25-26, and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chatterjee et al.** (US Patent # 5,774,661), in view of **Hansen et al.** (US Patent #7,013,316) and **Bacon et al.** (US Patent #6,430,538), as applied to claims 1, 11, 21 and 31 above, and further in view of **Randell** (US Patent #5,745,687).

As per claim 5, Chatterjee et al. teaches enabling said user to specify that said custom task is to be executed synchronously, wherein said custom task is executed in a synchronous manner (Workflow Stop, also accessible by button 352, inserts a stop point in a workflow) [col. 6, lines 56-58].

Further, it has been admitted as prior art, as a result of untimely/improperly challenged Official Notice, that it is old and well known in the workflow management art to be able to indicate a task to be executed either synchronously or asynchronously. Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Chatterjee et al. to enable a user to specify a task to be executed synchronously or asynchronously as doing so provides the user with more control over when and how the task is executed, thereby enhancing the workflow design features offered in the workflow builder of Chatterjee et al.

Chatterjee et al. does not explicitly disclose that:

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execution of said sequence of built-in tasks is resumed after completion of execution of said custom task such that said custom task is executed in a synchronous manner.

However, Randell teaches resuming a workflow sequence after completing execution of another task (The node 314 could wait for all previous nodes to complete, or any combination to complete, before proceeding; An additional features contained in the Distributed Workflow system is manual coordination of a process to suspend the processing of an instance, resume processing of the instance from the point where it was suspended; The RESUME process allows a suspended instance to continue processing. Once RESUMEd, the coordinator will apply all the operations that were suspended while the instance was suspended, by placing the suspended nodes in the work queue) [col. 8, lines 22-24, col. 16, lines 16-18, 57-63].

Both Chatterjee et al. and Randell are directed towards defining and executing workflow processes; thus, they are analogous references as they are directed toward a similar field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Chatterjee et al. to include the step of synchronous execution of custom tasks and built-in tasks, because doing so would enhance the features in the Flow Control menu to permit insertion, distribution,

and stopping points of a workflow to execute custom tasks required as input for work flow processing, as contemplated by Chatterjee et al. [col. 6, line 49 – col. 8, line 14].

As per claim 6, Chatterjee et al. teaches enabling said user to specify that said custom task is to be executed asynchronously (Distribution points allows several users to work on an item in parallel) [col. 6, lines 61-62].

Further, it has been admitted as prior art, as a result of untimely/improperly challenged Official Notice, that it is old and well known in the workflow management art to be able to indicate a task to be executed either synchronously or asynchronously. Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Chatterjee et al. to enable a user to specify a task to be executed synchronously or asynchronously as doing so provides the user with more control over when and how the task is executed, thereby enhancing the workflow design features offered in the workflow builder of Chatterjee et al.

While Chatterjee et al. discusses asynchronous execution of a task, Chatterjee et al. does not explicitly disclose that multiple tasks are executed in an asynchronous manner.

However, Randell teaches multiple execution of tasks within a workflow by using performing the tasks in parallel (Routing node 306 splits the specification created by

work node 304 to allow three additional work nodes to perform parallel operations within the procedure) {a task is divided into multiple jobs that are executed in parallel} [col. 7, lines 46-48].

Both Chatterjee et al. and Randell are directed towards defining and executing workflow processes; thus, they are analogous references as they are directed toward a similar field of endeavor. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Chatterjee et al. to include the step of asynchronous execution of custom tasks and built-in tasks, because doing so would enhance the ability of Chatterjee et al. to perform parallel execution of tasks at distribution points of the workflow, as contemplated [col. 6, lines 61-62]

Claims 15-16, 25-26, and 35-36 recite subject matter similar to that already rejected above. Therefore, claims 15-16, 25-26, and 35-36 are rejected on the same basis as claims 5-6 above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dhar et al. (US Patent #7,428,495) teaches an object based workflow system that allows a workflow designer to provide an object-based graphical interface modeling

the individual tasks required to complete a task within a bank. The workflow checklist may be customized for each bank and for each loan type within the bank, such that the workflow engine processes loan applications uniquely for each loan type and each bank.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHOI whose telephone number is (571)272-6971. The examiner can normally be reached on M-F 10-6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./ Examiner, Art Unit 3623 /Jonathan G. Sterrett/ Primary Examiner, Art Unit 3623